



DISPLAY METROLOGY SHORT COURSE

One day lecture

Two days+ laboratory work

August 8-10, 2006

Boulder, Colorado, USA

NIST (National Institute of Standards and Technology) and the Flat Panel Display Laboratory (FPDL) in Boulder, Colorado, are offering a short course on display metrology. The course will consist of one-day of lectures followed by two days of laboratory work covering some 13 different experiments, diagnostics, and measurements. The area around Boulder is beautiful! You may want to plan for an extended visit of the area to enjoy the mountains while you are here both for hiking and skiing (e.g., Estes Park, Rocky Mountain National Park, Arapahoe National Park, Winter Park, etc.), but be cautious of the high altitude.

Items you will receive:

FOR MORE DETAILS VISIT www.fpd.nist.gov

- White reflectance standard that you characterize in our laboratories
- Black glass sample that you characterize in our laboratories
- Display reflection samples that you characterize in our laboratories
- The 322 page VESA Flat Panel Display Measurements Standard (FPDM)
- USB memory stick containing examples of the detailed experiments (completed spreadsheets) and the lecture presentation (animated slides)
- Mini-flashlight for quick reflection-property inspections
- Hardcopy of lecture presentation

Computers are supplied; there is no need to bring your own laptop (there is hardly any room to accommodate laptops). People seem to enjoy working on the experiments in pairs or threesomes.

Topics considered: Review of radiometry, photometry and colorimetry; discussion of quantities and units used in photometry; review of simple photometric calculations; review of types of measurement instrumentation; veiling glare and management of stray light; display-reflection characterization; reflection haze and robustness; bidirectional reflectance distribution function; projection measurements; diagnostics; measurement uncertainty; etc.

Laboratory work: Reflection robustness, projection measurements, reflection measurements, characterization of white reflectance standard and black glass, BRDF measurements (low and high resolution), diffuse reflection measurements, color measurements and detector diagnostics, use of masks and frusta, and use of stray-light-elimination tubes (SLETs).

Registration Information:

Cost: \$2000 per person

Contact: Wendy McBride

wmcbride@boulder.nist.gov
303-497-4500

Technical Contacts (Instructors):

Edward F. Kelley (kelley@nist.gov)

Paul A. Boynton (paul.boynton@nist.gov)

FOR MORE DETAILS VISIT www.fpd.nist.gov

Online registration available (note "s", case sensitive, chronologically listed): <https://rproxy.nist.gov/CRS/>

Please note: The cost may increase in the future. Class size is currently limited to 24 people. There will be no Internet access provided within NIST.

